Complete Summary

GUIDELINE TITLE

Head lice.

BIBLIOGRAPHIC SOURCE(S)

Frankowski BL, Weiner LB. Head lice. Pediatrics 2002 Sep;110(3):638-43. [46 references] PubMed

COMPLETE SUMMARY CONTENT

SCOPE

DISEASE/CONDITION(S)

Head lice (Pediculosis capitis) infestation

GUIDELINE CATEGORY

Diagnosis
Management
Prevention
Treatment

CLINICAL SPECIALTY

Family Practice
Infectious Diseases
Pediatrics
Preventive Medicine

INTENDED USERS

Advanced Practice Nurses
Nurses
Physician Assistants
Physicians

GUIDELINE OBJECTIVE(S)

To clarify issues of diagnosis and treatment of head lice and make recommendations for dealing with head lice in the school setting

TARGET POPULATION

Children

INTERVENTIONS AND PRACTICES CONSIDERED

Diagnosis

1. Examination for a live louse or nits (tiny eggs)

Prevention

1. Education of children to not share personal items
2. Education of adults on signs and symptoms of head lice infestation

Treatment

1. Pediculicides
    - Pyrethrins plus piperonyl butoxide (RID, A-200, R & C, Pronto, Clear Lice System)
    - Permethrin (1%) (Nix); the treatment of choice
    - Lindane (1%) (Kwell)
    - Malathion (0.5%) (Ovide)
2. Other topical agents
    - Permethrin (5%) (Elimite), not currently approved by the U.S. Food and Drug Administration (FDA) for use as a pediculicide
    - Crotamiton (10%) (Eurax), not currently approved by the FDA for use as a pediculicide
3. Oral agents
    - Sulfamethoxazole/Trimethoprim (Septra, Bactrim), not currently approved by the FDA for use as a pediculicide
    - Ivermectin (Stromectal), not currently approved by the FDA for use as a pediculicide
4. "Natural" products (not required to meet FDA efficacy and safety standards)
    - HairClean 1-2-3 (anise, ylang ylang, coconut oils, and isopropyl alcohol)
5. Occlusive agents
    - Petrolatum shampoo
    - Other occlusive agents such as mayonnaise, tub margarine, herbal oils, and olive oil
6. Manual removal of nits

7. Environmental interventions
    - Check family members
    - Clean all hair care products, bedding, and any other item that had contact with the head of the infected person
8. Educate parents and teachers regarding detection and treatment of head lice

MAJOR OUTCOMES CONSIDERED

- Pediculicidal/ovicidal activity
- Side effects of chemical and natural agents

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

Not stated

NUMBER OF SOURCE DOCUMENTS

Not stated

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Not stated

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Not stated

METHODS USED TO ANALYZE THE EVIDENCE

Review

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not applicable

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Not stated

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

METHOD OF GUIDELINE VALIDATION

Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Not stated

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

1. Pediatricians should be knowledgeable about head lice infestations and treatments and should be available as information resources for families, schools, and other community agencies.
2. School personnel involved in detection of head lice infestation should be appropriately trained. The importance and difficulty of correctly diagnosing an active head lice infestation should be acknowledged. Schools should examine any lice related policies they may have with this in mind.
3. Permethrin 1% (Nix) is currently the recommended treatment for head lice, with retreatment in 7 to 10 days if live lice are seen. Instructions on proper use of products should be carefully relayed. Safety and efficacy should be taken into account when recommending any product for treatment of head lice infestation.
4. None of the currently available pediculicides are 100% ovicidal and resistance has been reported with lindane, pyrethrins, and permethrin. Treatment failure does not equate with resistance, and most instances of such failure represent misdiagnosis/misidentification or noncompliance with the treatment regimen.
5. Head lice screening programs have not been proven to have a significant effect on the incidence of head lice in the school setting over time and are not cost-effective. Parent education programs may be helpful in the management of head lice in the school setting.
6. Manual removal of nits after treatment with a pediculicide is not necessary to prevent spread. In the school setting, removal may be considered to decrease diagnostic confusion.
7. No healthy child should be excluded from or allowed to miss school time because of head lice. "No nit" policies for return to school should be discouraged.

CLINICAL ALGORITHM(S)

None provided

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of evidence supporting each recommendation is not specifically stated.

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

- Reduced parental anxiety
- Prevention of the spread of head lice
- Effective treatment of head lice
- Alleviation of itching

POTENTIAL HARMS

- Lindane is an organochloride that has central nervous system toxicity in humans if used incorrectly; several cases of severe seizures in children using lindane have been reported.
- The major concerns with malathion are the high alcohol content of the product, making it highly flammable, and the risk of severe respiratory depression if accidentally ingested.
- Itching or mild burning of the scalp caused by inflammation of the skin in response to topical therapeutic agents can persist for many days after lice are killed and is not a reason for retreatment.
- Rare severe allergic reactions (Stevens-Johnson syndrome) to sulfamethoxazole/trimethoprim make it a potentially undesirable therapy if alternatives exist.

Subgroups Most Likely to be Harmed:

- The labels on the pyrethrins plus piperonyl butoxides warn against possible allergic reaction in patients who are sensitive to ragweed, but modern extraction techniques minimize the chance of product contamination, and reports of true allergic reactions are rare. However, pyrethrins should be avoided in persons allergic to chrysanthemums.
- If ivermectin gets past the blood-brain barrier, it blocks essential neural transmission; young children may be at higher risk for this adverse drug reaction. Thus, ivermectin should not be used for children who weigh less than 15 kg.

QUALIFYING STATEMENTS

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The recommendations in this statement do not indicate an exclusive course of treatment or serve as a standard of medical care. Variations, taking into account individual circumstances, may be appropriate.

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Getting Better
Staying Healthy

IOM DOMAIN

Effectiveness

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

Frankowski BL, Weiner LB. Head lice. Pediatrics 2002 Sep;110(3):638-43. [46 references] PubMed

ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

2002 Sep

GUIDELINE DEVELOPER(S)

American Academy of Pediatrics - Medical Specialty Society

SOURCE(S) OF FUNDING

American Academy of Pediatrics

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Committee on School Health

Committee on Infectious Diseases

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FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

GUIDELINE STATUS

This is the current release of the guideline.

American Academy of Pediatrics (AAP) Policies are reviewed every 3 years by the authoring body, at which time a recommendation is made that the policy be retired, revised, or reaffirmed without change. Until the Board of Directors approves a revision or reaffirmation, or retires a statement, the current policy remains in effect.

GUIDELINE AVAILABILITY

Electronic copies: Available from the American Academy of Pediatrics (AAP) Policy Web site.

Print copies: Available from American Academy of Pediatrics, 141 Northwest Point Blvd., P.O. Box 927, Elk Grove Village, IL 60009-0927.

AVAILABILITY OF COMPANION DOCUMENTS

None available

PATIENT RESOURCES

None available

NGC STATUS

This NGC summary was completed by ECRI on January 28, 2003. The information was verified by the guideline developer on April 16, 2003.

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